CLAIMS:

1. Protective circuit for analog sensors which are connected with a supply voltage line, a grounding line and a sensor output line,
characterized in that one transistor (T1 and T2) respectively is interposed in the supply voltage line (6) and the grounding line (8), whose control connection is connected to one voltage divider (R1, R2; R3, R4) respectively situated between the supply voltage line (6) and the grounding line (8), the two transistors (T1,T2) being switched through in the normal operation and being switched off at least when the grounding line (M8) is interrupted, and in that the sensor output line (7) is connected by way of a pull-down resistor (R5) with a ground potential which is independent of the grounding line (8).

2. Protective circuit according to Claim 1,
characterized in that the pull-down resistor (R5) is arranged in a control unit (10) outside a housing (1) of the sensor (2) and is arranged between a measuring input and a ground potential of the control unit.

3. Protective circuit according to Claim 1,

characterized in that both transistors (T1, T2) are MOSFET transistors.

4. Protective circuit according to Claim 3,' characterized in that the transistor (T2) interposed in the grounding line (8) is operated in an inverse manner.

5. Protective circuit according to Claim 1, characterized in that, in addition, a diode (D) switched in the transmitting direction from the supply voltage to the ground is connected in the voltage divider (R1, R2) to which the control connection of the transistor switched into the supply voltage line (6) is connected.'